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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/863,467	05/22/2001	Eric Joseph Johnson	10961138-6	1259

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EXAMINER

HSIEH, SHIH WEN

ART UNIT PAPER NUMBER

2861

DATE MAILED: 08/14/2002

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/863,467

Applicant(s)

JOHNSON ET AL.

Examiner

Shih-wen Hsieh

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 May 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 and 11-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 4,8,9,14 and 18-24 is/are allowed.
- 6) ☒ Claim(s) 1-3,5-7,11-13 and 15-17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☒ The proposed drawing correction filed on 22 May 2001 is: a) ☐ approved b) ☒ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☒ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 3.
- ☐ Interview Summary (PTO-413) Paper No(s). _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other:

DETAILED ACTION

1. The reissue oath/declaration filed with this application is defective (see 37 CFR 1.175 and MPEP § 1414) because of the following:

. It does not identify the citizenship of each inventor.

. The full name of each inventor (family name and at least one given name together with any initial) has not been set forth.

. It does not identify the mailing or post office address of each inventor. A mailing or post office address is an address at which an inventor customarily receives his or her mail and may be either a home or business address. The mailing or post office address should include the ZIP Code designation. The mailing or post office address may be provided in an application data sheet or a supplemental oath or declaration. See 37 CFR 1.63(c) and 37 CFR 1.76.

2. Claims 1-9 and 11-24 are rejected as being based upon a defective reissue declaration under 35 U.S.C. 251 as set forth above. See 37 CFR 1.175.

The nature of the defect(s) in the declaration is set forth in the discussion above in this Office action.

3. Claims 1-3, 5-7, 11-13, 15-17 (claim 15 is the independent claim, claims 5-7, 11-13, 16 and 17 are depending on claim 15 indirectly and directly) are rejected under 35 U.S.C. 251 as being improperly broadened in a reissue application made and sworn to by the assignee and not the patentee. A claim is broader in scope than the original claims if it contains, within its scope any conceivable product or process which would have infringed the original patent. A

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claim is broadened if it is broader in any one respect even though it may be narrower in other respects.

Claim 1:

Vaporizing step is deleted in claim 1 to broaden the invention; and providing steps are deleted, however, they are condensed in the jetting step.

Claim 3:

Several providing steps have been deleted, the limitations of the method steps between the original claim recitations and those in the amendment have not been changed, however, the method steps in the amended claim 3 have been condensed.

Claim 15:

The recitations in this claim are broader than those in claim 1, since the counting and controlling steps are not recited in claim 15.

4. The amendment filed 5-22-2001 proposes amendments to claims 1-9 and 11-24 that do not comply with 37 CFR 1.173(b), which sets forth the manner of making amendments in reissue applications. A supplemental paper correctly amending the reissue application is required.

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5. Please add "Amended" on the proposed drawing changes in figs. 36-38 and 40, refer to 37 CFR 1.173(b)(3).

6. Please underline all newly added claims 15-24, refer to 37 CFR 1.173(d)(2).

7. Claims 3, 4, 19 and 21 are objected to because of the following informalities:

In regard to:

Claim 3:

i. Page 3, line 7, please change "the atmosphere" into "atmosphere" (to be the same as those in claim 1 in page 2, line 3).

ii. There is short of a relationship between "a non-contact applicator" in line 6 and "a resilient applicator spring" in line 12. Please refer to the bracketed lines 11-12, the relationship is recited there, however, it has been deleted in the amendment. Appropriate action is required

Claim 4:

Line 5, please change "the atmosphere" into "atmosphere";

Line 1, page 4, change "treatment fluid" into "servicing fluid" for consistency; and

Line 5, page 3, the recitation is: "a servicing fluid applicator for projecting servicing fluid through atmosphere onto the print head and wiper" and line 1, page 4, the recitation is: "wherein said applicator comprises an elastically

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deformable spring for impelling treatment fluid toward at least one of the print head and wiper". Please note the two underlined portions above, the first underlined portion can be interpreted as the servicing fluid is projected onto both the head and the wiper, whereas the second underlined portion can be interpreted as the servicing fluid is impelled to either the head or the wiper, this is because the second underlined portion is recited as "**at least one of**".

Appropriate action is required.

Claim 19:

Line 3, please change "the atmosphere" into "atmosphere".

Claim 21:

Line 7, please change "the atmosphere" into "atmosphere".

8. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

9. Claims 5-7, 11-13 and 15-17 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

i. Claims 5-7 and 11-13 are apparatus claims referring to a system (e.g., claim 5 recites "A system according to..."), whereas claims 15-17 to which claims 6-7 and 11-13 depend on are method claims and there is no system being recited therein. Therefore, it is improper for claims 5-7 and 11-13 to depend on

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claims 15 and 16 to which a system is not recited directly or indirectly.

Appropriate action is required.

ii. Due to improper dependencies, subject matters such as in claim 5: "Said applicator", etc. are lacking of antecedent basis. Appropriate action is required.

Allowable Subject Matter

10. Claims 4, 8, 9, 14, 18-24 are allowed.

11. Claims 1-3, 5-7, 11-13 and 15-17 (claim 15 is the independent claim, claims 5-7, 11-13, 16 and 17 depend on claim 15 indirectly and directly) would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 251 set forth in this Office action.

12. Claims 5-7, 11-13 and 15-17 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

13. The following is a statement of reasons for the indication of allowable subject matter:

In regard to:

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Claim 1 (independent claim):

Prior art fail to teach a method step of jetting a reproducible quantity of servicing fluid from an inkjet print head used as a servicing fluid applicator through atmosphere onto at least one of the print head of the ink jet printing mechanism and a print head wiper in the combination as claimed.

Claim 3 (independent claim):

Prior art fail to teach a method step of cleaning a print head by deforming a resilient applicator spring and then releasing the spring to project a servicing fluid from the spring onto the print head by rebound of the spring and then followed by a wiping operation in the combination as claimed.

Claim 4 (independent, not amended):

Prior art fail teach an applicator used in cleaning a print head in combination with a wiper to wiper clean the print head in a wiping operation, the applicator comprises an elastically deformable spring for impelling a treatment fluid toward at least one of the print head and wiper in the combination as claimed.

Claim 14 (independent claim not amended):

Prior art fail to teach a method step of providing another print head as a non-contact servicing fluid applicator and orienting the applicator to jet servicing fluid in a reproducible quantity onto a surface of the print head of the inkjet printer and a wiper that is used to wipe clean the head in a wiping operation in the combination as claimed.

Claim 15 (independent claim):

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Prior art fail to teach a method step of using another print head to project a reproducible quantity of servicing fluid through atmosphere onto the print head of the ink jet printing mechanism in the combination as claimed.

Claim 18 (independent):

Prior art fail to teach a non-contact service fluid applicator in fluid communication with a source of the service fluid, the non-contact service fluid applicator comprises a second inkjet print head oriented to eject servicing fluid in a reproducible quantity onto a surface of the carriage mounted print head in the combination as claimed.

Claims 19 and 21 (independent method and apparatus):

Prior art fail to teach a method step of cleaning an inkjet print head having a wiper to wipe clean the head in a wiping operation by projecting a reproducible quantity of servicing fluid from an applicator pump through atmosphere onto at least one of the print head and the ^{wiper} ~~pump for projecting the servicing fluid onto the~~ _{head} ~~and the~~ in the combination as claimed.

The following two prior art teach using liquid applied to a wiping device to wipe clean a print head in a wiping operation and an inkjet printer uses Low Thermal Turn-on Energy (TTOE) to eject ink from an inkjet print head, such TTOE will allow some secondary ink adhere to the face of the head that ejects ink, the secondary ink adhere to the face of the head functions as a solvent:

US 5,552,811, "Liquid discharging apparatus and printing method using such an apparatus" issued to Kurata et al., 9/96 teach a rinsing liquid (81, fig. 1) is applied downwardly through a nozzle (75A) to a cleaning member (70, i.e., a

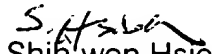
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wiper), the cleaning member is then used to wipe clean a print head (2), refer to col. 7, lines 34-41. Another US 5,706,038, "Wet wiping system for inkjet print heads" issued to Jackson et al., 1/98 teach an ink jet print head (30, fig. 3) using a low thermal turn-on energy (TTOE) to fire ink droplets (84), where secondary ink droplets (85) are adhered to nozzle face (76) of the head (30) to dissolve the contaminants, a wiper (64) then wipes clean the face in the wiping operation. None of the above teaches using a print head to eject a servicing liquid onto a face of the print head.

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shih-wen Hsieh whose telephone number is 703-305-4961. The examiner can normally be reached on 7:30AM -5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, J. Hilton can be reached on 703-308-0719. The fax phone numbers for the organization where this application or proceeding is assigned are 703-305-3431/3432 and 703-308-7382/7722/7724 for regular communications and 703-308-5841 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.


Shih-wen Hsieh
Examiner
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SWH



August 8, 2002